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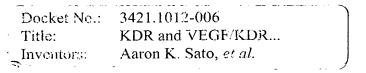
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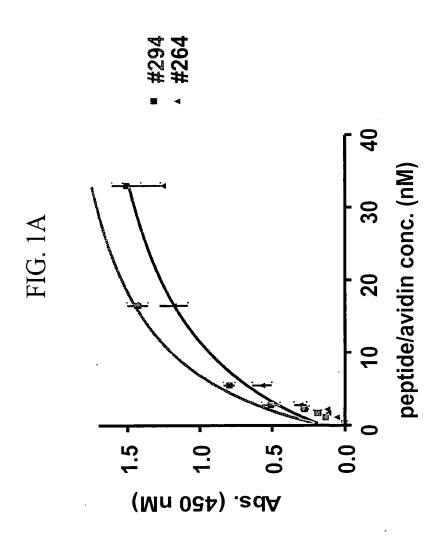
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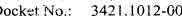
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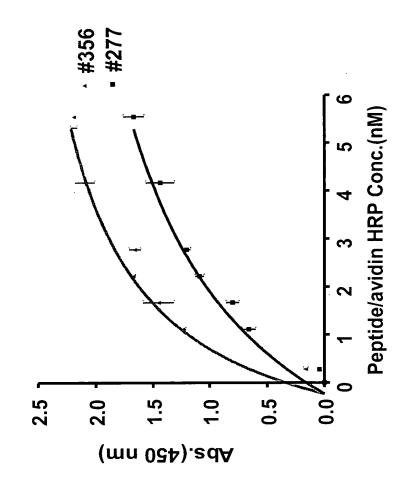
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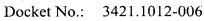
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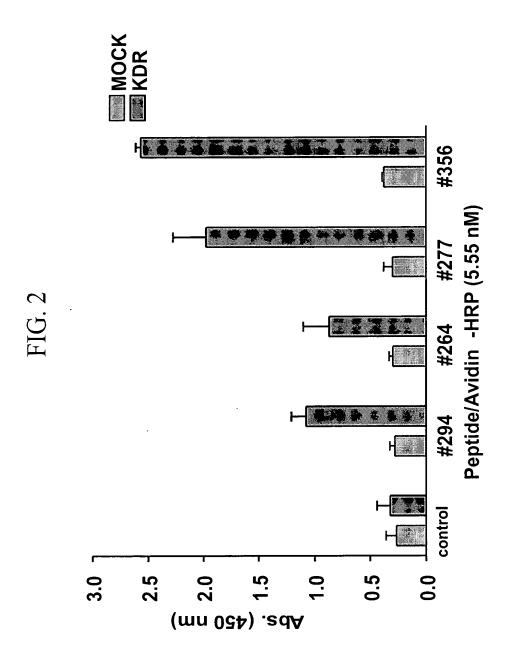












Docket No.: 3421.1012-006

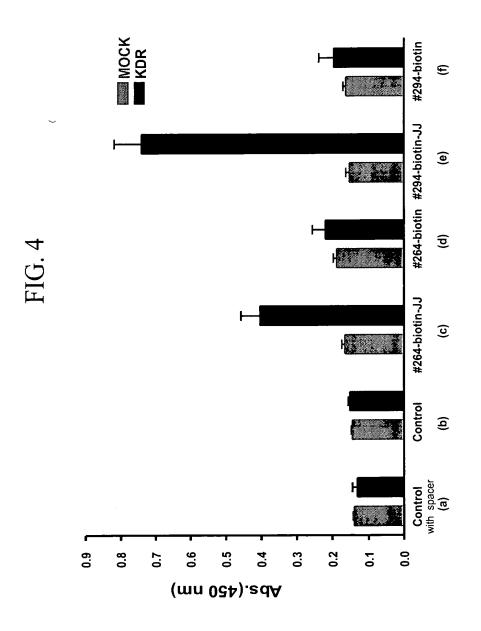
Title: KDR and VEGF/KDR...

Inventors: Aaron K. Sato, et al.

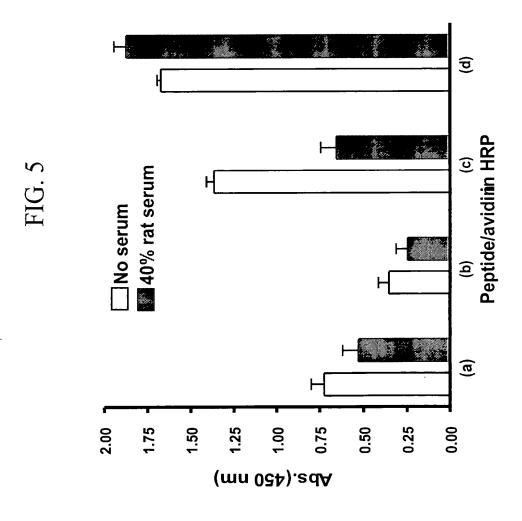
(a) Ac-AGPKWCEEDWYYCMITGT-GGGK(Biotin-di(aminodioxaocta)-)-NH₂ (SEQ ID NO:264)

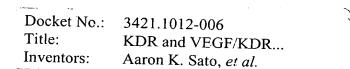
(b) Ac-AGPKW<u>CEEDWYYC</u>MITGT-GGGK(Biotin-)-NH₂ (SEQ ID NO:264)

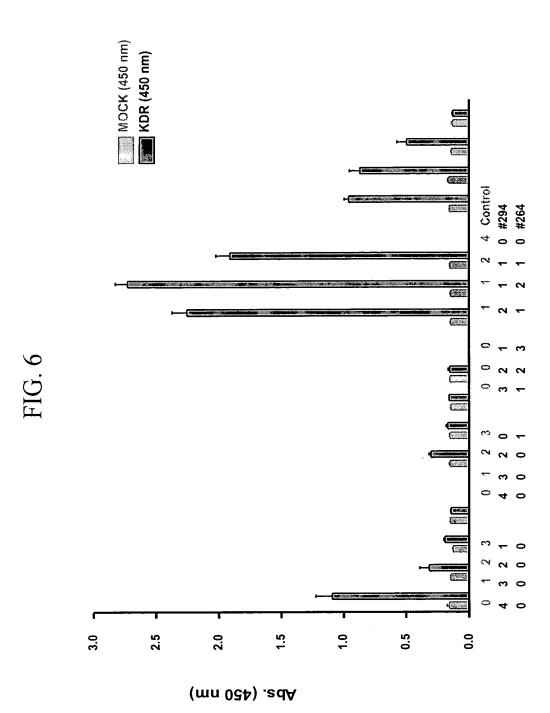
(c) Ac-GDSRVCWEDSWGGEVCFRYDP-GGGK(Biotin-di(aminodioxaocta)-)-NH₂ (SEQ ID NO:294) (d) Ac-GDSRVCWEDSWGGEVCFRYDP-GGGK-(Biotin-)-NH₂ (SEQ ID NO:294) Docket No.: 3421.1012-006

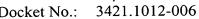


Docket No.: 3421.1012-006

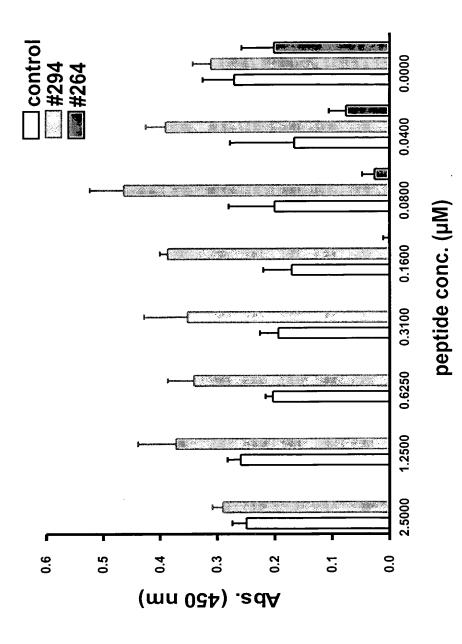








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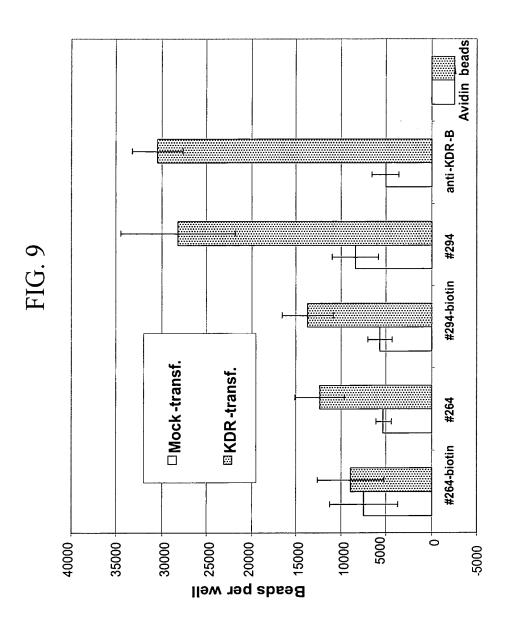


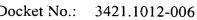
Docket No.: Title: Inventors:

3421.1012-006 KDR and VEGF/KDR... Aaron K. Sato, et al.

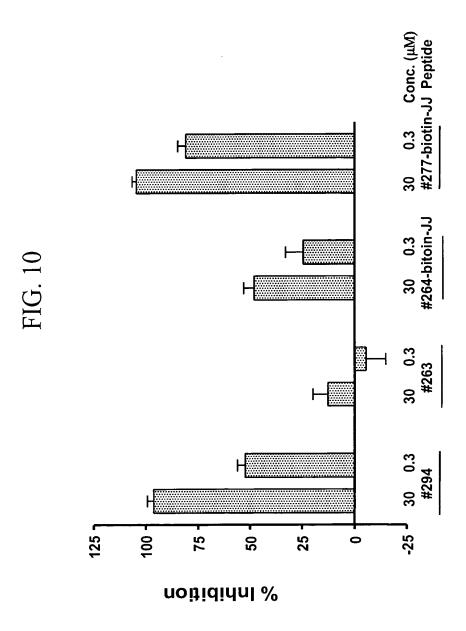
Sequence	SEQ ID NO:	K _D , B (μΜ)
GDSRVCWEDSWGGEVCFRYDPGGGK	294	0.069
VCWEDSWGGEVCFGGGK	368	0.91
GDSRVCWEDSWGGEVCFGGGK	369	1.30
VCWEDSWGGEVCFRYDPGGGK	337	0.040
SRVCWEDSWGGEVCFRYGGGGK	371	0.035
GDSRVCWEDSWGGEVCFRYGGGK	372	0.060

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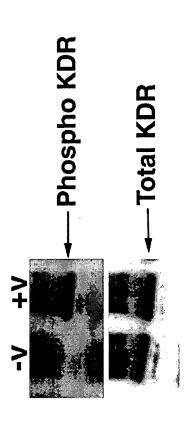


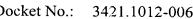


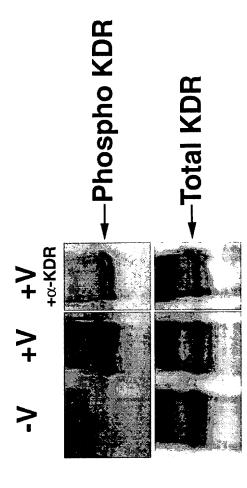
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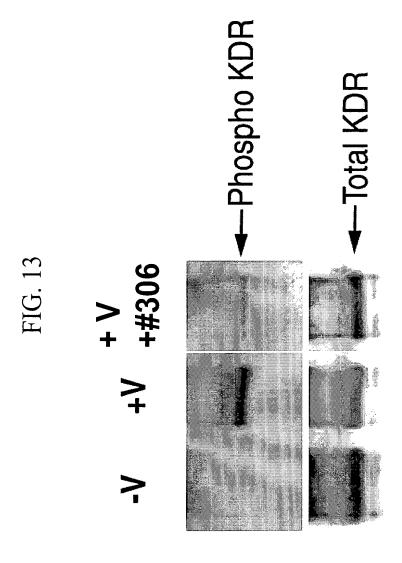


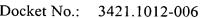


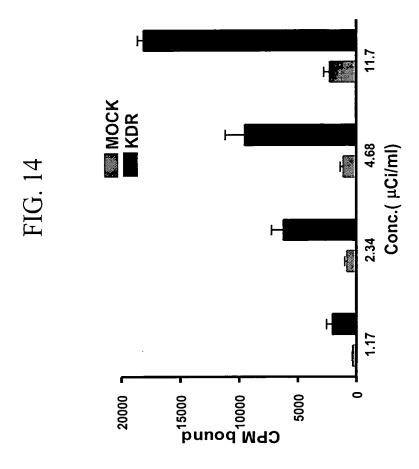


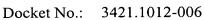


Docket No.: 3421.1012-006

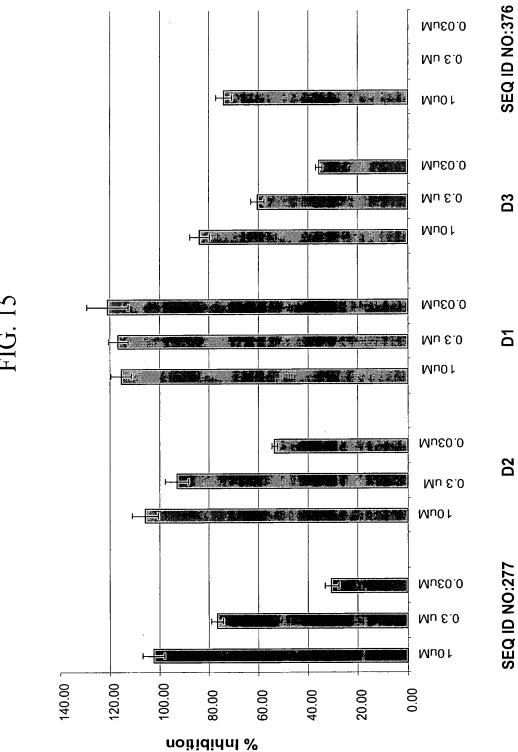


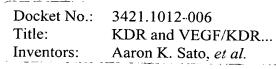




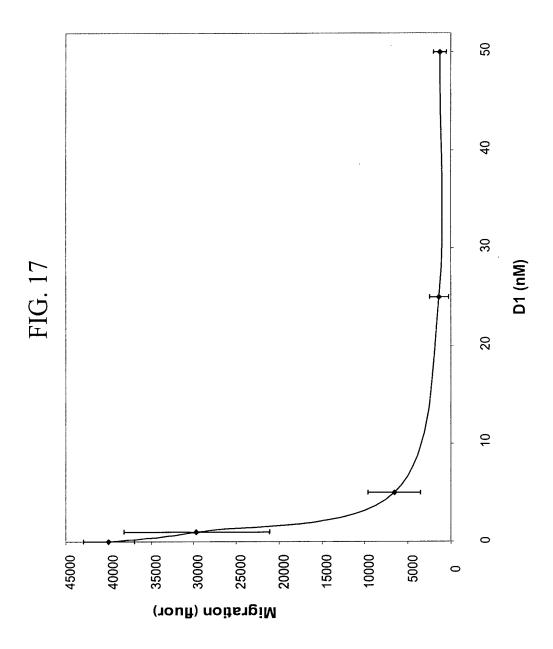


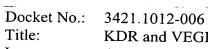
Title: KDR and VEGF/KDR... Aaron K. Sato, et al. Inventors:

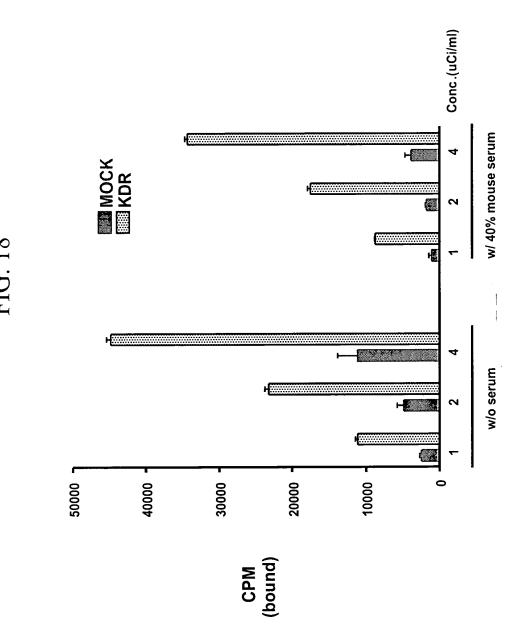


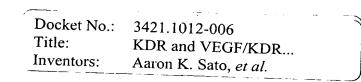


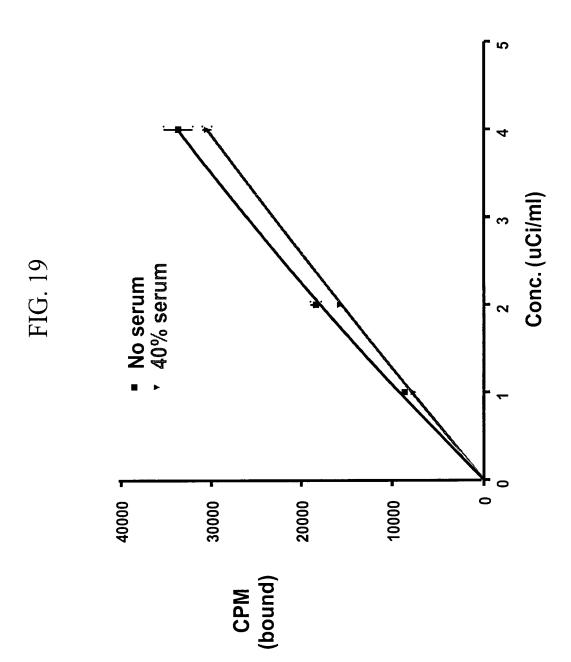
Docket No.: 3421.1012-006

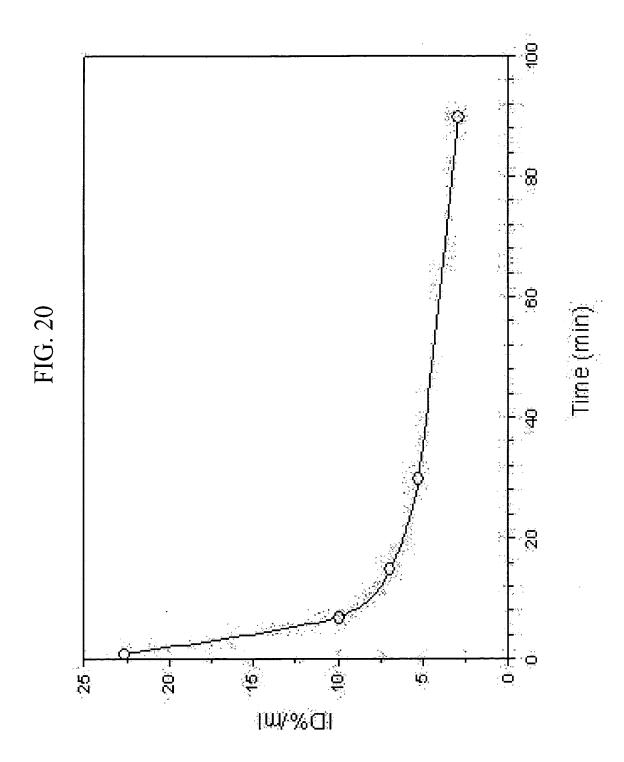






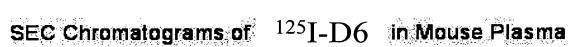


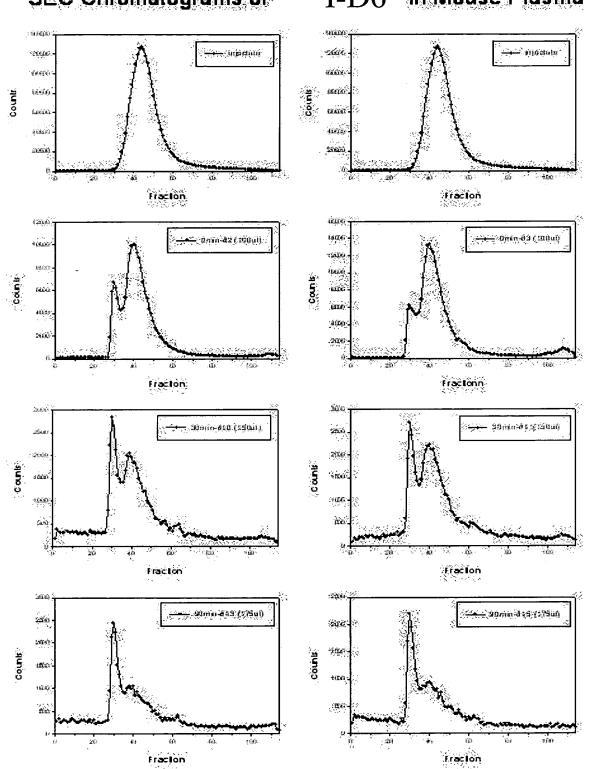




Docket No.: 3421.1012-006

FIG. 21





KDR and VEGF/KDR...

Inventors:

Aaron K. Sato, et al.

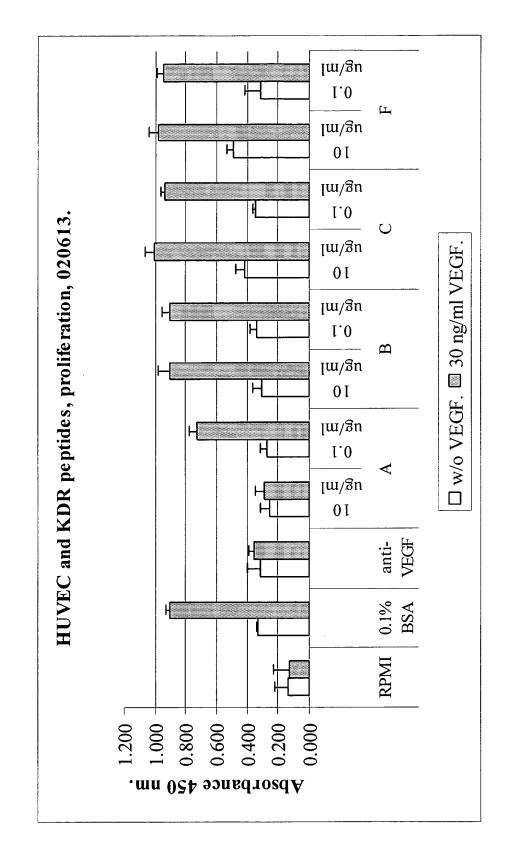
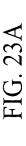
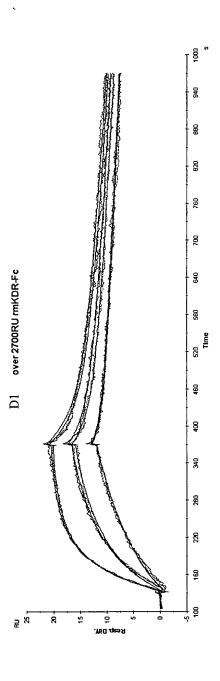
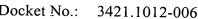


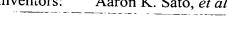
FIG. 22

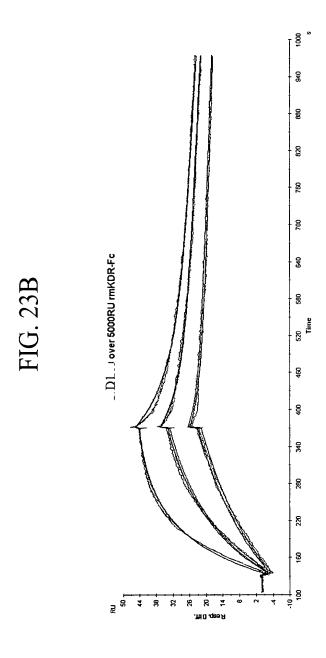
3421.1012-006 KDR and VEGF/KDR... Aaron K. Sato, *et al*. Docket No.: Title: Inventors:

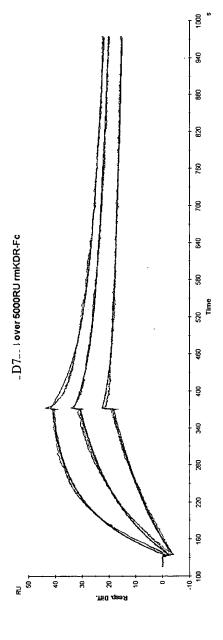




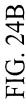


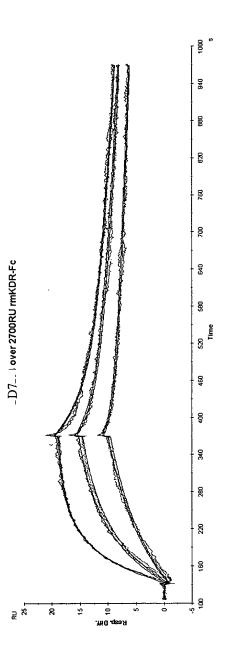






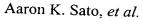
3421.1012-006 KDR and VEGF/KDR... Aaron K. Sato, *et al*. Docket No.: Title: Inventors:

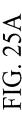


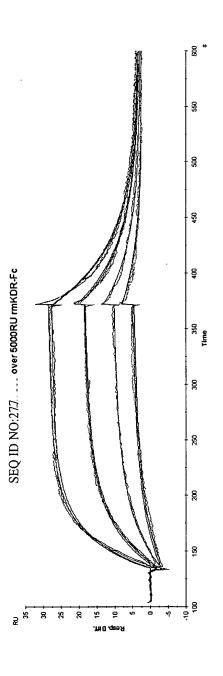


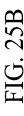
3421.1012-006 KDR and VEGF/KDR... Aaron K. Sato, *et al*.

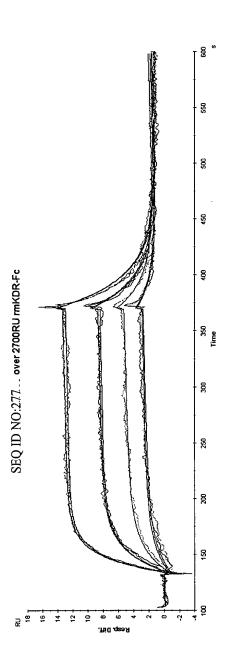












3421.1012-006

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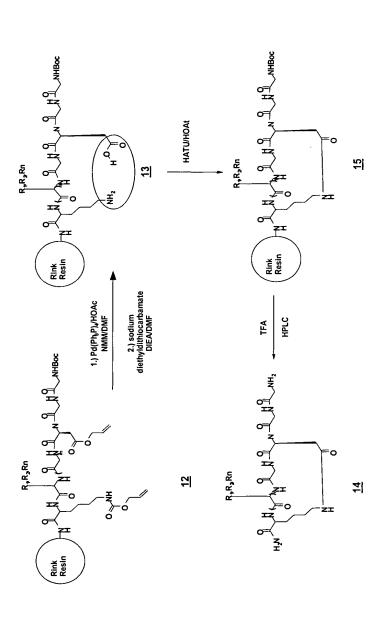
3421.1012-006

Docket No.: Title: Inventors: KDR and VEGF/KDR... Aaron K. Sato, et al.

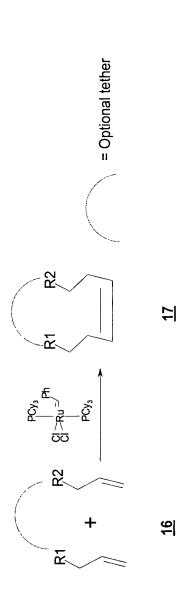
Fmoc-Dap(Boc-Ser(t-Bu))-OH

FIG. 28

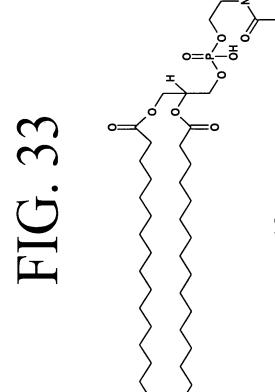
3421.1012-006 KDR and VEGF/KDR... Aaron K. Sato, *et al*. Docket No.: Title: Inventors:

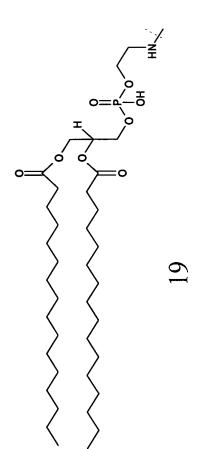


Docket No.: Title: 3421.1012-006 KDR and VEGF/KDR... Inventors: Aaron K. Sato, et al.



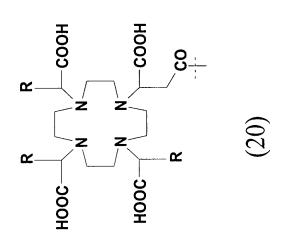
Docket No.: Title: 3421.1012-006 KDR and VEGF/KDR... Inventors: Aaron K. Sato, et al.





Docket No.:

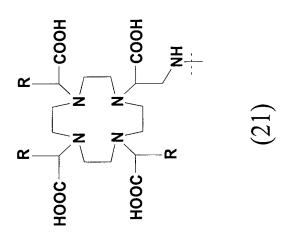
3421.1012-006 KDR and VEGF/KDR... Title: Inventors: Aaron K. Sato, et al.



Docket No.: 3421.1012-006

Title: KDR and VEGF/KDR... Inventors: Aaron K. Sato, *et al*.

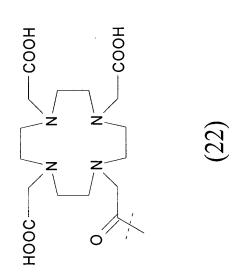
FIG. 34B



Docket No.:
Title:
Inventors:

3421.1012-006 KDR and VEGF/KDR... Aaron K. Sato, *et al*.





Docket No.:

3421.1012-006 KDR and VEGF/KDR... Title: Aaron K. Sato, et al. Inventors:

Docket No.: Title: KDR and VEGF/KDR... Inventors: Aaron K. Sato, et al.

3421.1012-006 KDR and VEGF/KDR... Docket No.: Title: Inventors: Aaron K. Sato, et al.

Docket No.: 3421.1012-006

Title: KDR and VEGF/KDR... Inventors: Aaron K. Sato, et al.

FIG. 35

3421.1012-006

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3421,1012-006

Docket No.: Title: Inventors: KDR and VEGF/KDR... Aaron K. Sato, et al.

Docket No.: 3421.1012-006
Title: KDR and VEGF/KDR...
Inventors: Aaron K. Sato, et al.

3421.1012-006 KDR and VEGF/KDR... Aaron K. Sato, *et al*. Docket No.: Title: Inventors:

3421.1012-006 KDR and VEGF/KDR... Docket No.: Title: Inventors: Aaron K. Sato, et al.

3421.1012-006 KDR and VEGF/KDR... Aaron K. Sato, *et al*. Docket No.: Title: Inventors:

0= Ac-AQDWYYDEILSMADQLRHAFLSGGGGG-NH

Ac-GDSRVCWEDSWGGEVCFRYDPGGG-NH

3421 1012-006

Docker No.: Title: Inventors: KDR and VEGF/KDR... Aaron K. Sato, *et al.*

Ac-AGPTWCEDDWYYCWLFGTGGG-NH.

Ac-GDSRVCWEDSWGGEVCFRYDPGGG-NH'

Docket No.: Title: Inventors: 3421.1012-006 KDR and VEGF/KDR... Aaron K. Sato, *et al*.

Ac-VCWEDSWGGEVCFRYDPGGG-N CONH2 Ac-AGPTWCEDDWYYCWLFGTGGG-N'

Docket No.: Title: Inventors: 3421.1012-006 KDR and VEGF/KDR... Aaron K. Sato, *et al*.

0= Ac-AGPTWCEDDWYYCWLFGTGGG-NH_

3421.1012-006 KDR and VEGF/KDR... Aaron K. Sato, *et al.* Docket No.: Title: Inventors:

Docket No.: 3421.1012-006 Title: KDR and VEG

Title: KDR and VEGF/KDR... Inventors: Aaron K. Sato, et al.

3421.1012-006 KDR and VEGF/KDR... Aaron K. Sato, *et al*. Docket No.: Title: Inventors:

0= Ac-AGPTWCEDDWYYCWLFGTGGG-NH,

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Docket No.: Title:

3421.1012-006 KDR and VEGF/KDR... Aaron K. Sato, *et al*. Inventors:

Ac-GDSRVCWEDSWGGEVCFRYDPGGG-NH Ac-AGPTWCEDDWYYCWLFGTGGG-NH.

Docket No.: 3421.1012-006

Title: KDR and VEGF/KDR...
Inventors: Aaron K. Sato, et al.

3421.1012-006

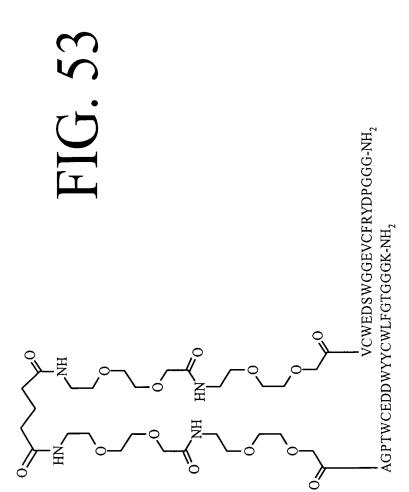
Docket No.: Title: Inventors: KDR and VEGF/KDR... Aaron K. Sato, et al.

3421.1012-006 KDR and VEGF/KDR... Aaron K. Sato, *et al.* Docket No.: Title: Inventors:

Ac-agptwceddwyycwlfgrggg-
$$^{\text{CONH}_2}$$
, $^{\text{CONH}_2}$, $^{\text{HN}}$ $^{\text{HN}}$ $^{\text{HN}}$ $^{\text{HN}}$ $^{\text{HN}}$ $^{\text{HN}}$ $^{\text{NH}}$ $^{\text{HN}}$ $^{\text{CONH}_2}$ $^{\text{CONH}_2}$

3421.1012-006

Docket No.: Title: KDR and VEGF/KDR... Aaron K. Sato, *et al*. Inventors:



3421.1012-006

Docket No.: Title: KDR and VEGF/KDR... Inventors: Aaron K. Sato, et al.

N-9 9 9 VCWEDSWGGEVCFRYDPGGG-NH₂ LFG D D W Y Y C W \mathbf{c} ⋈ Ы G

Docket No.: 3421.1012-006

Title: KDR and VEGF/KDR... Inventors: Aaron K. Sato, *et al*.

FIG. 55

3421.1012-006 KDR and VEGF/KDR... Aaron K. Sato, *et al*. Docket No.: Title: Inventors:

CONH2 Ac-VCWEDSWGGEVCFRYDPGGG-NH ÇONH₂ Ac-AGPTWCEDDWYYCWLFGTGGG-NH

Docket No.: Title: Inventors: 3421.1012-006 KDR and VEGF/KDR... Aaron K. Sato, *et al*.

3421.1012-006

Docket No.: Title: Inventors: KDR and VEGF/KDR...

Aaron K. Sato, et al.

Ac-AGPTWCEDDWYYCWLFGTGGG-NH

Ac-GDSRVCWEDSWGGEVCFRYDPGGG-NH

Docket No.: 3421.1012-006

Title: KDR and VEGF/KDR...
Inventors: Aaron K. Sato, et al.

FIG. 59

3421.1012-006

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Docket No.: 3421.1012-006

Title: KDR and VEGF/KDR...

Inventors: Aaron K. Sato, et al.

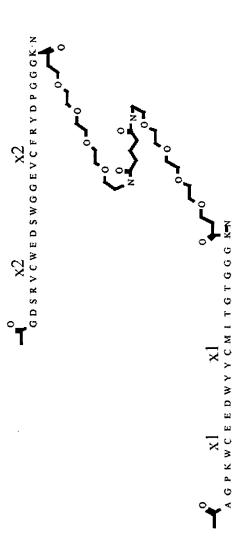
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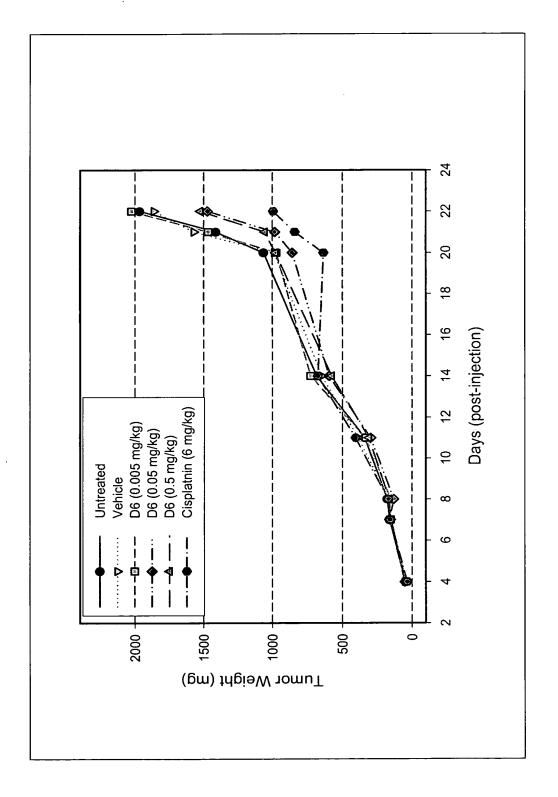
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3421.1012-006 KDR and VEGF/KDR... Docket No.: Title: Inventors: Aaron K. Sato, et al.



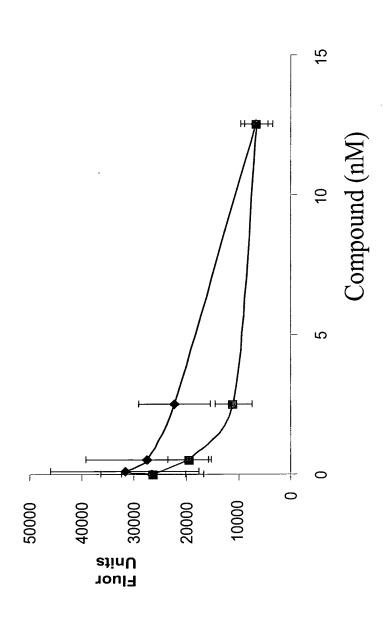




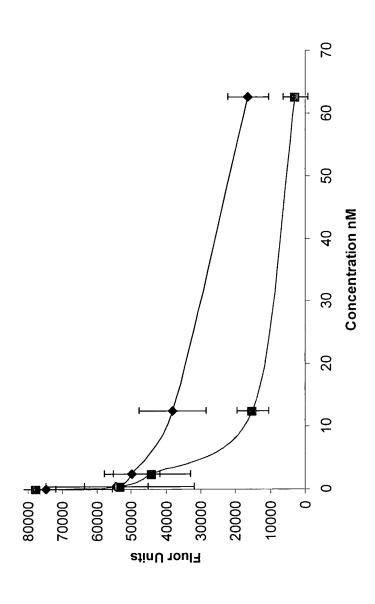
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Docket No.: Title: KDR and VEGF/KDR... Inventors: Aaron K. Sato, et al.









Docket No.: 3421.1012-006
Title: KDR and VEGF

Title: KDR and VEGF/KDR... Inventors: Aaron K. Sato, *et al*.

FIG. 67B

Docket No.: Title: 3421.1012-006

KDR and VEGF/KDR... Aaron K. Sato, et al. Inventors:

-Resin) (Pal-PEG-PS) Ac-AGPTWCEDDWYYCWLFGTGGGK(IV-Dde)-NH

SEQ ID NO:277

10% hydrazine in DMF ($2 \times 10 \text{ min}$)

Fmoc-Lys(iV-Dde)-OH/HOBt/DIC/DMF

20% piperidine in DMF (2 x 10 min)

Fmoc-NH-JJ-Biotin/HOBt/DIC/DMF

 NH_2NH_2/DMF (10%, 2 x 10 min)

4. 7.

Fmoc-Ser(GalNAc(Ac) $_3$ - α -D)-OH/HATU/DIEA/DMF ô.

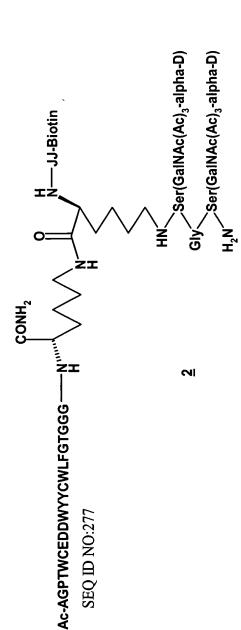
FIG. 68

20% piperidine in DMF (2 x 10 min)
 Fmoc-Gly-OH/HOBt/DIC/DMF
 20% piperidine/DMF (2 x 10 min)

10. Fmoc-Ser(GalNAc(Ac)₃-α-D)-OH/HATU/DIEA/DMF

11. 20% piperidine in DMF ($2 \times 10 \text{ min}$)

Reagent B DMSO/aq. N-Methylglucamine/pH 8/air/2 days



Fmoc-Ser(GalNAc(Ac) $_3$ - α -D)-OH/HATU/DIEA/DMF Fmoc-Ser(GalNAc(Ac) $_3$ - α -D)-OH/HATU/DIEA/DMF DMSO/N-methylglucamine/pH 8/air/2 days 1. 10% hydrazine in DMF (2 x 10 min)
 2. Fmoc-Ser(GalNAc(Ac)₃-α-D)-OH/HATL
 3. 20% piperidine in DMF (2 x 10 min)
 4. Fmoc-Gly-OH/HOBt/DIC/DMF
 5. 20% piperidine in DMF (2 x 10 min)
 6. Fmoc-Ser(GalNAc(Ac)₃-α-D)-OH/HATU
 7. 20% piperidine in DMF (2 x 10 min)
 8. reagent B
 9. DMSO/N-methylglucamine/pH 8/air/2 da Ser(GalNAc(Ac)₃-alpha-D) Ser(GalNAc(Ac)₃-alpha-D) -Resin (Pal-PEG-PS) Ac-VCWEDSWGGEVCFRYDPGGG ——N Ac-VCWEDSWGGEVCFRYDPGGGK(iV-Dde)-NH -**SEQ ID NO:337** SEQ ID NO:337 FIG. 69

Docket No.: Title:

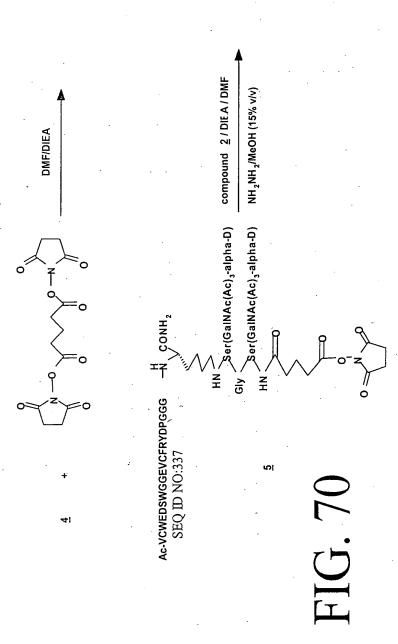
Inventors:

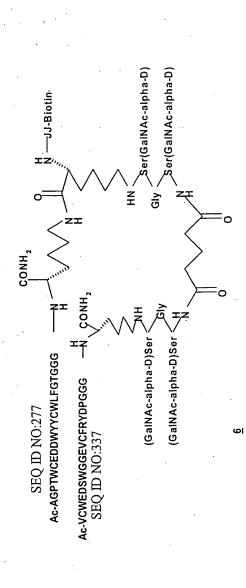
3421.1012-006

KDR and VEGF/KDR...

Aaron K. Sato, et al.

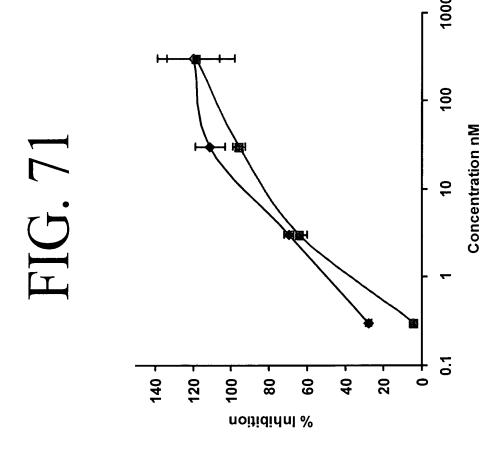
Docket No.: Title: Inventors: 3421.1012-006 KDR and VEGF/KDR... Aaron K. Sato, *et al*.



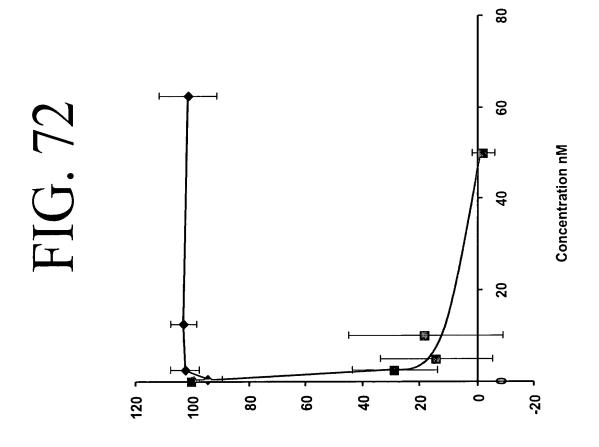


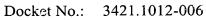
3421.1012-006

Docket No.: Title: KDR and VEGF/KDR... Aaron K. Sato, et al. Inventors:

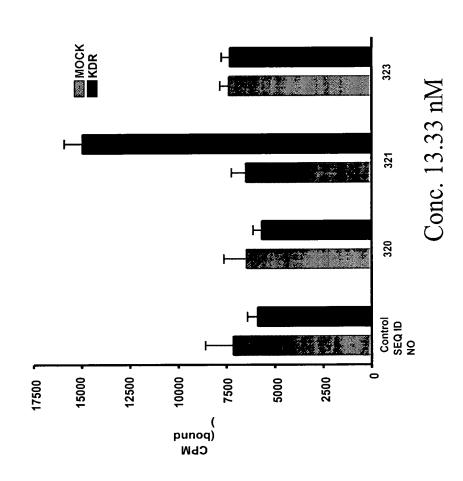


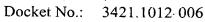
3421.1012-006 KDR and VEGF/KDR... Docket No.: Title: Aaron K. Sato, et al. Inventors:



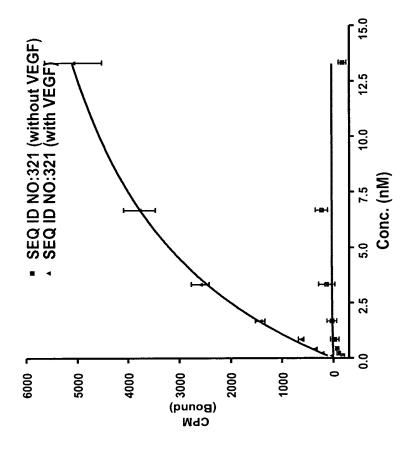






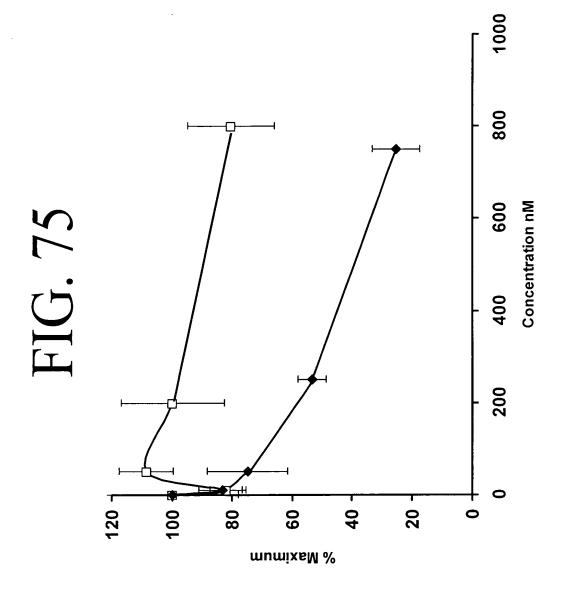


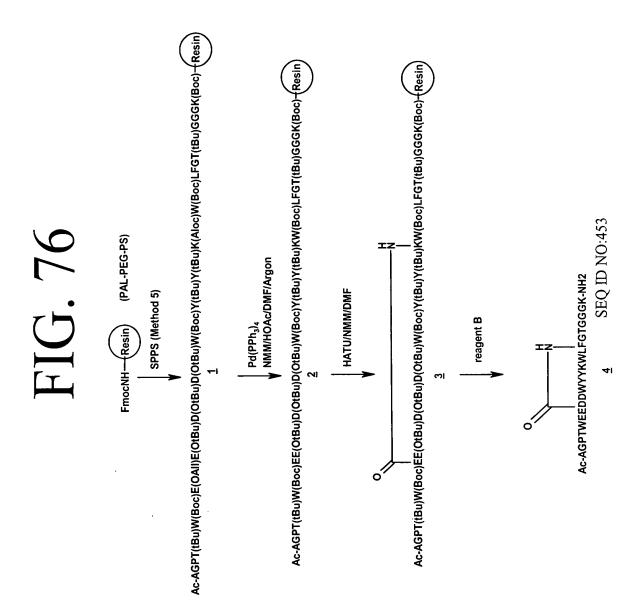




Docket No.:

3421.1012-006 KDR and VEGF/KDR... Aaron K. Sato, *et al*. Title: Inventors:





Title: KDR and VEGF/KDR... Inventors: Aaron K. Sato, *et al.*

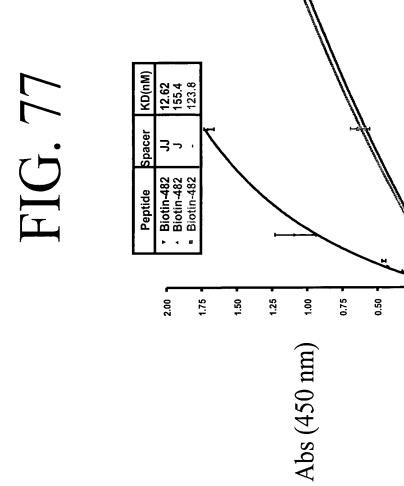
. S

15 20 Conc. (nM)

6

0.00

0.25

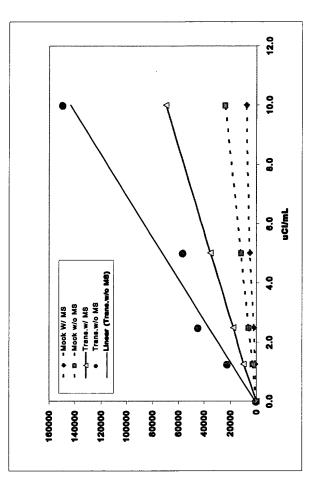


3421.1012-006 Docket No.:

KDR and VEGF/KDR... Title:

Inventors: Aaron K. Sato, et al.

FIG. 78



Sound (CPM)

Title: KD Inventors: Aa

KDR and VEGF/KDR... Aaron K. Sato, *et al*.

Explanation of Abbreviations: Other abbreviations: BOA = (S)-Carboxymethyl-amino)-ethyl]-amino}-pentanedioic-4-oyl; Glut-ebyl, SATA = S-acetyl-alpha-thioacetyl, GalNAc(Ac)3-alpha-D=(deoxy-3,4,6-tri-O-acetyl-alpha-D-galactopyranosyl)-L-serinyl, iV-dioxocyclohex-1-ylidene)-3-methylbutyl, 5CF = 5-carboxyfluorescaminooctanoyl, Dpr = 2,3-diaminopropanoyl, Adca3 = (3β,5α,7α,dihydroxycholan-24-oyl, PnAO6 = 4-{2-(2-Hydroxyimino-1,1-dinhydroxyimino-1,1-dimethyl-ethylamino)-methyl]-ethylcarbamoyl}	glutaryl or 1, D-Beta[2-ace Dde = 1-(4,4-einyl; $J = 3,6$ 12α)-3-aminotyl-ethyl-ethylar	5-pentanedi- tamido-2- -dimethyl-2,6- -dioxa-8- o-7,12-	
nydroxymmio-1,1-dmethyl-entyrammoy-methylj-entyrearoamoy.	-outanoyi.		
Compound Sequence/Structure (Parent Sequence in red text)	Obtained ? Y/N	SEQ ID NO	MS Data [†]
Ac-AGPTWCEDDWYYCWLFGTGGGK(Te-Chelator)-NH2		277	
Ac-AGPTWCEDDWYYCWLFGTGGGK(PnAO6-NH-(O=)C(CH2)3C(=O)- IJ)-NH2	Y	277	1611.7 [M- 2H]/2,1074.4 [M- 3H]/3 ^a
Ac-AGPTWCEDDWYYCWLFGTGGGK-NH₂		277	
H₂N-JJK(ivDde)-AGPTWCEDDWYYCWLFGTGGG-NH₂	Ÿ	277	1501.5 [M-2H]/2ª
Ac-AGPTWCEDDWYYCWLFGTGGGK(BOA-K)-NH ₂	Y	277	1561.9 [M-3H]/3ª
NH ₂ -JJVCWEDSWGGEVCFRYDPGGG-NH ₂	Y	999 (337 - C term K)	2505.4 [M-H], 1251 [M-2H]/2 ^e
H ₂ N-JJAGPTWCEDDWYYCWLFGTGGGK(iV-Dde)-NH ₂	Ÿ.	277	1501.5 [M-2H]/2, 1000.8 [M-3H]/3 ^a
Ac-AGPTWCEDDWYYCWLFGTGGGK-NH ₂	Y	277	1274.4 [M-2H]/2ª
Ac-AGPTWCEDDWYYCWLFGTGGGK-NH ₂	Ý	277	1274.4 [M-2H]/2ª
Ac-AGPTWCEDDWYYCWLFGTGGGK(5CF)-NH ₂	Y	277	1453.5 [M-2H]/2, 968.7 [M-3H]/3ª
Ac-AGPTWCEDDWYYCWLFATGGGK(Biotin-JJ)-NH ₂ ;	Y	379	1539.8 [M-2H]/2°
Ac-AQXXXXXXXXXXXXXXXXXXXXXGGGGGK(Biotin-JJ)-NH ₂	MARKAN PROPERTY	380	1939.0 [M-2H]/2"

Fig 79A

Compound Sequence/Structure (Parent Sequence in red text)	Obtained ? Y/N	SEQ ID NO	MS Data [†]
Ac-AQPDNWKEFYESGWKYPSLYKPLGGGGGK(Biotin-JJ)-NH ₂	¥	381	1878.9 [M+2H]/2 ^b
Ac-AQQIEYVNDKWYWTGGYWNVPFGGGGGK(Biotin-JJ)-NH ₂	Y	382	1866.6 [M-2H]/2 ^a
Ac-AQDALEAPKRDWYYDWFLNHSPGGGGK(Biotin-JJ)-NH ₂	Y	383	1845.5 [M-2H]/2ª
Ac-AQWYHDGLHNERKPPSHWIDNVGGGGGK(Biotin-JJ)-NH2	Y	384	1833.7 [M-2H]/2 ⁸
Ac-AQDWYWQRERDKLREHYDDAFWGGGGK(Biotin-JJ)-NH ₂	1. 1. V -1. 1.	385	1990.8 [M-2H]/2 ^a
Ac-AGPTWCEDDWYYCWLFGTGGGK-NH₂		277	
Ac-AAPTWCEDDWYYCWLFGTGGGK-NH₂	Y	386	2563.5 [M-H], 1281.8 [M-2H]/2 ^a
Ac-AGATWCEDDWYYCWLFGTGGGK-NH ₂	Y	387	2523.6 [M-H], 1261.5 [M-2H]/2 ^a
Ac-AGPAWCEDDWYYCWLFGTGGGK-NH₂	Y	388	2519.8 [M-H], 1259.5 [M-2H]/2 ^a
Ac-AGPTACEDDWYYCWLFGTGGGK-NH₂	Y	389	2434.6 [M-H], 1216.8 [M-2H]/2 ^a
Ac-AGPTWCADDWYYCWLFGTGGGK-NH ₂	Y.	390	1244.9 [M-2H]/2a
Ac-AGPTWCEADWYYCWLFGTGGGK-NH₂	Y	391	2434.6 [M-H], 1216.6 [M-2H]/2 ^a
Ac-AGPTWCEDAWYYCWLFGTGGGK-NH₂	YOUR	392	1252.7 [M-2H]/2 ⁸
Ac-AGPTWCEDDAYYCWLFGTGGGK-NH₂	Ÿ	393	2434.3 [M-H], 1216.8 [M-2H]/2 ^a
Ac-AGPTWCEDDWAYCWLFGTGGGK-NH₂	¥.	394	2457.5 [M-H], 1239.0 [M-3H+Na], 1228.3 [M-2H]/2 ^a
Ac-AGPTWCEDDWYACWLFGTGGGK-NH₂	Y	395	2456.8 [M-H], 1228.2 [M-2H]/2 ^a
Ac-AGPTWCEDDWYYCALFGTGGGK-NH₂	Y	396	2505.4 [M-H], 1252.5 [M-2H]/2ª
Ac-AGPTWCEDDWYYCWAFGTGGGK-NH ₂	THE YEAR	397	1253.3 [M-2H]/2ª
Ac-AGPTWCEDDWYYCWLAGTGGGK-NH ₂	TO YES	398	1236.4 [M-2H]/2ª
Ac-AGPTWCEDDWYYCWLFATGGGK-NH₂	Y	399	2564.6 (M-H),1281.6 [M-2H]/2 ^a
Ac-AGPTWCEDDWYYCWLFGAGGGK-NH₂	Ÿ	400	2519.7 [M-H], 1259.6 [M-2H]/2ª
Ac-AGPTWCEDDWYYCWLFGTGGGK-NH2	Industrial providers Control	277	
Ac-aGPTWCEDDWYYCWLFGTGGGK-NH ₂	Ÿ	277	2549.7 [M-H], 1274.7 [M-2]/2 ^a
Ac-AaPTWCEDDWYYCWLFGTGGGK-NH₂	Υ.	401	2564.7 [M-H], 1292.7 [M-3H+Na]/2, 1281.2 [M-2H]/2 ^a
Ac-AGaTWCEDDWYYCWLFGTGGGK-NH₂	Ŷ	402	1261.4 [M-2H]/2 ⁸
Ac-AGPaWCEDDWYYCWLFGTGGGK-NH₂	Ÿ.	403	2519.2 [M-H], 1259.1 [M-2H]/2 ^a
Ac-AGPTaCEDDWYYCWLFGTGGGK-NH ₂	Y	404	2434.6 [M-H], 1217.1 [M-2H]/2 ^a
Ac-AGPTWCaDDWYYCWLFGTGGGK-NH₂	Y.,	405	2490.8 [M-H], 1245.6 [M-2H]/2 ^a

Fig 79B

Compound Sequence/Structure (Parent Sequence in red text)	Obtained ? Y/N	SEQ ID NO	MS Data [†]
Ac-AGPTWCEaDWYYCWLFGTGGGK-NH ₂		406	2505.8 [M-H], 1252.1 [M-2H]/2 ⁸
Ac-AGPTWCEDaWYYCWLFGTGGGK-NH₂	Y	407	2506.0 [M-H], 1252.0 [M-2H]/2 ^a
Ac-AGPTWCEDDaYYCWLFGTGGGK-NH ₂	Y	408	2434.4 [M-H], 1217.1 [M-2H/2] ⁸
Ac-AGPTWCEDDWaYCWLFGTGGGK-NH₂	Y	409	2458 [M-H], 1228.6 [M-2H]/2 ^a
Ac-AGPTWCEDDWYaCWLFGTGGGK-NH ₂	¥	410	2457.6 [M-H], 1228.5 [M-2H]/2 ⁸
Ac-AGPTWCEDDWYYCaLFGTGGGK-NH₂	Y	411	2434.8 [M-H], 1228.1 [M-3H+Na]/2, 1217.0 [M-2H]/2 ^a
Ac-AGPTWCEDDWYYCWaFGTGGGK-NH₂	Ť	412	2507.7 [M-H], 1264.1 [M-3H+Na]/2, 1253.6 [M-2H]/2 ^a
Ac-AGPTWCEDDWYYCWLaGTGGGK-NH₂	, A	413	2473.6 [M-H], 1247.6 [M-3H+Na]/2, 1236.2 [M-2H]/2 ^a
Ac-AGPTWCEDDWYYCWLFaTGGGK-NH2	¥	414	2563.7 [M-H], 1709.3 [unassigned], 1292.7 [M-3H+Na]/2, 1281.9 [M-2H]/2 ^a
Ac-AGPTWCEDDWYYCWLFGaGGGK-NH ₂	Y	415	2519.0 [M-H], 1259.6 [M-2H]/2°
Ac-GDSRVCWEDSWGGEVCFRYDPGGGK-NH ₂		294	
Ac-GDSRVCWEDaWGGEVCFRYDPGGGK-NH₂	No.	416	1401.9 [M-3H+Na], 1391.7 [M-2H]/2°
Ac-GDSRVCWEDSWaGEVCFRYDPGGGK-NH ₂	NO. YOU	417	1664.4 [M-2H]/2ª
Ac-GDSRVCWEDSWGaEVCFRYDPGGGK-NH ₂	范德(Yalang	418	1664.7 [M-2H]/2ª
Ac-AGPTWCEDDWYYCWLFGTGGGK-NH ₂		277	
Ac-AGjTWCEDDWYYCLFTGTGGGK-NH ₂	是是不多的。	419	1267.9 [M-2H]/2 ⁸
Minimum Number of AA for DWYY Motif		420	
Ac-GDWYYGGGK-NH ₂	Ÿ	421	1041.2 [M-H] ^a
Ac-EDDWYYGGGK-NH ₂	Y.	422	1228.3 [M-H], 612.8 [M-2H/2] ^a
Ac-AQDWYYAWLFTGGGGK-NH₂	in y	423	1859.7 [M-H], 986.4 [M-2H]/2 ⁸
Ac-AQDWYYAWL-NH ₂	V. Y (8)	424	1254.4 [M-H] ^a
Ac-AGPTWCEDDWYYCWLFGTGGGK-NH2		277	
Ac-AGPTWCEDEWYYCWLFGTGGGK-NH ₂	Y .	425	1281.5 [M-2H/2], 853.6 [M-3H/3] ^a
Ac-AGPTWCEDDWWYCWLFGTGGGK-NH₂	Y	426	1285.4 [M-2H/2], 856.8 [M-3H/3] ^a

Compound Sequence/Structure (Parent Sequence in red text)	Obtained ? Y/N	SEQ ID NO	MS Data [†]
Ac-AGPTWCEDDWFYCWLFGTGGGK-NH ₂	Ý	427	1265.8 [M-2H/2] ^a
Ac-AGPTWCEDDWYYCWLFGTGGGK-NH2		277	
Ac-AGPTWAEDDWYYAWLFGTGGGK-NH₂	¥	428	2486.9 [M-H], 1243.6 [M-2H]/2 ^a
Ac-AAPAWCAADWYYCWLFGTGGGK-NH2	Y	429	2432.7 (M-H), 1272.5 [M+TFA-2H]/2 ^a 2192.6 [M-H], 1096.0
Ac-AGPTWCaDDWYYCWLFGTGGGK-NH ₂	. Y	430	[M-2H/2] ^a
Ac-AGPTWCEDDWYYCWLFGTGGGK-NH ₂		277	
Ac-CEDDWYYCWLFGTGGGK-NH ₂	Y	431	2037.6 [M-H], 1018.4 [M-2H]/2, 520.8 [M- 6H+2Na]/4 ⁸
Ac-WCEDDWYYCWLFGTGGGK-NH ₂	Ŷ	432	2221.8 [M-H], 1111.6 [M-2H]/2, 740.7 [M-3H]/3 ^a
Ac-WCAADWYYCWLF-NH2	Y	433	1663.5 [M-H] ^a
Ac-WCEDDWYYCWLF-NH ₂	Y	434	1766.5 [M-H], 882.1 [M-2H]/2 ^a
Ac-AGPTWCEDDWYYCWLFGTGGGK(Biotin-JJ)-NH2		277	
Ac-AGPTWCEDDWYYCWLFGTGGGKK(iV-Dde)-Adca3-NH ₂	Y	373	1665.2 [M-2H]/2ª
Ac-GDSRVCWEDSWGGEVCFRYDPGGGK(Biotin-JJ)-NH ₂		294	
Ac-VCWEDSWGGEVCFRYDPGGGK(Biotin-JJ)-NH ₂	Y	337	1449.3 [M-2H]/2, 965.8 [M-3H]/3 ^a
Ac-VCWEDSWGGEVCFRYGGGK(Biotin-JJ)-NH₂	Ý	435	2689.4 [M-H], 1344.0 [M-2H]/2 ^a
Ac-GDSRVCWEDSWGGEVCFRYDPGGGK-NH ₂		294	
Ac -GDSRVAWEDSWGGEVAFRYDPGGGK-NH $_2$	Ÿ	436	1368.4 [M-2H]/2ª
Ac-VCWEDSWGGEVCFRYGGGK-NH ₂	Y	437	1085.8 [M-2H]/2ª
Ac-VCWEDSWGGEVCFRYGGGK-NH ₂	Ý	437	2172.0 [M-H], 1086.0 [M-2H]/2ª
Ac-GDSRVCWEDaWGGEVCFRYDPGGGK-NH₂	Y	438	1401.9 [M-3H+Na]/2, 1391.7 [M-2H]/2 ^a
Ac-GDSRVCWEDfWGGEVCFRYDPGGGK-NH ₂	Y	439	1429.7 [M-2H]/2 ^a
Ac-GDSRVCWEDkWGGEVCFRYDPGGGK-NH₂	Y	440	1430.7 [M-3H+Na]/2, 1420.1 [M-2H]/2 ^a
Ac-GDSRVCWEDSWGfEVCFRYDPGGGK-NH ₂	Y	441	1444.5 [M-2H]/2ª
Ac-GDSRVCWEDSWGkEVCFRYDPGGGK-NH₂	(Y, "C")	442	1435.1 [M-2H]/2 ^a
Ac-GDSRVCWEDSWGeEVCFRYDPGGGK-NH ₂	Y.	443	1435.5 [M-2H]/2ª
Sequences Binding to KDR-VEGF Complex			
Ac-AGPGPCKGYMPHQCWYMGTGGGK(5CF)-NH ₂	*	321	1543.7 [M-2H]/2, 1028.8 [M-3H]/3, 771.3 [M-4H]/4, 617.0 [M-5H]/5 ⁸

Docket No.: 3421.1012-006 Title: KDR and VEGI

Inventors: Aar

KDR and VEGF/KDR... Aaron K. Sato, *et al*.

Compound Sequence/Structure (Parent Sequence in red text)	Obtained ? Y/N	SEQ ID NO	MS Data [†]
Ac-AGPGPCKGYMPHQCWYMGTGGGK(Biotin-JJ)-NH ₂	Y	321	2937.4 [M-H] , 1468.2 [M-2]/2 ^a
Ac-AGMPWCVEKDHWDCWWWGTGGGK(Biotin-JJ)-NH₂	Y	444	1622.5 [M-2H]/2 ⁸
Ac-AGYGPCKNMPPWMCWHEGTGGGK(5CF)-NH ₂	Y	323	2860.1 [M-H], 1429.8 [M-2H]/2 ^a
Ac-AGYGPCKNMPPWMCWHEGTGGGK(Biotin-JJ)-NH ₂	The Land Control of the Control of t	323	1058.6 [M-2H]/2ª
Pathogenic Sequences			
Ac-GDGSWCEMRQDVGKWNCFSDDPGGGK(Biotin-JJ)-NH ₂	Y.	445	1537.5 [M-2H]/2ª
Ac -GCKTKISKVKKKWNCYSNNKVTGGGK(Biotin-JJ)-N H_2	Y	446	1706.8 [M+2H]/2, 1138.6 [M+3H]/3, 854.0 [M+4H]/4, 683.7 [M+5H]/5, 569.8 [M+6H]/6, 488.5 [M+7H]/7 ^b
Ac-KQFCEENWERGRNHYYCLTTLSGGGK(Biotin-JJ)-NH2	¥	447	1817.5 [M+2H]/2, 1211.8 [M+3H]/3, 909.1[M+4H]/4, 727.5 [M+5H]/5 ^b
Ac-GDSRVCWEDWGGVVCRYRYDAGGGK(Biotin-JJ)-NH ₂	Y	448	1675.2 [M+2H]/2, 1116.9 [M+3H]/3, 838.2 [M+4H]/4 ^b
AGPTWCEDDWYYCWLFGTGGGK(Biotin-JJ)-NH2		277	
Ac-AGPTWCEDDWYYCWLFGTGGGk(nSbGJJ)-NH ₂	Y	277-nSbGJJ	1621.5 [M-2H]/2 ^a
AGPTWCEDDWYYCWLFGTGGGK-NH₂		277	
Dansyl-NH -AGPTWCEDDWYYCWLFGTGGGK(5CF)-NH ₂	Y	277-5CF	1549.1 [M-2H]/2ª
Other KDR Compounds - Hangovers from Year 2001 such as DX-684 truncations etc.			
Ac-CEEDWYYCMITGTGGGK(Biotin-JJ)-NH ₂	7. (Y	449	1232.5 [M-2H]/2ª
Ac-AGPKWCEEDWYYCMITaT-NH ₂	Y	450	1509.6 [M-2H]/2 ^a
Ac-AaPKWCEEDYYCMITGTGGGK-NH ₂	Y	451	2504.2 [M-H], 1251.6 [M-2H]/2 ^a
Ac-AaPKWCEEDYYCMITGTGGGK(Biotin-JJ)-NH ₂	Ý	451	1509.6 [M-2H]/2 ^a
Ac-AGPDWCAADWYYCYITG-NH ₂	Ŷ	452	1992.5 [M-H] , 995.8 [M-2H]/2 ^a
Ac-AGPTWCEDDWYYCWLFGTGGGK-NH ₂		277	
Ac-AGPTWEEDDWYYKWLFGTGGGK-NH ₂ (6-13 lactam)	Y	453	1291.9 [M-2H]/2ª
Ac-AGPTWKEDDWYYEWLFGTGGGK-NH ₂ (6-13 lactam)	iv ± y	454	1291.9 [M-2H]/2ª
Ac-AGPTW-Dpr-EDDWYYDWLFGTGGGK-NH ₂ (6-13 lactam)	r Y	455	1263.9 [M-2H]/2ª
Ac-AGPTWDEDDWYY-Dpr-WLFGTGGGK-NH ₂ (6-13 lactam)	Y. Y.	456	1263.9 [M-2H]/2 ⁸
Ac-AGPTWDEDDWYYKWLFGTGGGK-NH ₂ (6-13 lactam)	140 Y 150	457	1285.1 [M-2H]/2ª
Ac-AGPTWDEDDWYYKWLFGTGGGK-NH₂	Y	457	1294.1 [M-2H]/2 ^a

Fig 79E

Compound Sequence/Structure (Parent Sequence in red text)	Obtained ? Y/N	SEQ ID NO	MS Data [†]
Ac-AQDWYYDEILSMADQLR-NH ₂	Y.	458	2156.9 [M-H], 1077.9 [M-2H]/2 ^a
Ac-DWYYDEILSMADQL-NH ₂	Y	459	1800.5 [M-H], 900.2 [M-2H]/2 ^a
Ac-AQDWYYDEILSMADQLRHAFLS-NH₂	Y	460	1355.2 [M-2H]/2ª
Ac-AQDWYYGGGK-NH₂	Y	461	1183.3 [M-H] ^a
Ac-DWYYGGGK-NH ₂	Y	462	984.2 [M-H] ^a
Ac-AQDWYYDEIL-NH₂	Ÿ	463	1354.5 [M-H] ^a
Ac-AEWSYQDMIRLDYADLQLSHFAGGGGGK(Biotin-JJ)-NH ₂ ;	Y	464	1820.1 [M+2H]/2 ^b
Ac-AQDWYYDEILSMADQLRHAFLSGGGGGK-NH₂	Y	356	1562.1 [M-2H]/2ª
Ac-AQDWYYDEILSMADQLRHAFLSGGGGGK-NH₂	¥	356	1562.3 (M-2H]/2ª
Ac-AQDWYYDEILSMADQLRHAFLSGGGGGK(iV-Dde)-NH₂	Y	356	1729.7 [M-2H]/2, 1152.5 [M-3H]/3ª
Ac-AQDWYYDEILSMADQLRHAFLSGGGGGK(SATA)-NH₂	Ÿ	356-SATA	1620.2 [M-2H]/2ª
Ac-AEWSYQDMIRLDYADLQLSHFAGGGGGK(SATA)-NH ₂	Y	464	1620.4 [M+2H]/2 ^b
Various Parent Sequences Ac-AQDWYYDEILJGRGRGGRGG-NH2	¥	465	1185.0 [M+2H]/2, 790.8 [M+3H]/3 ^b
Ac-EDDWYYJGRGGRGGRGG-NH ₂	Ý	466	972.3 [M+2H]/2, 648.0 [M+3H]/3 ^b
A¢-GDWYYJGRGGRGGRGG-NH₂	¥	467	879.3 [M+2H]/2, 586.6 [M+3H]/3 ^b
Ac-AQDWYYAWLFTJGRGGRGGRGG-NH ₂	Y	468	1259.7 [M+2H]/2, 840.1 [M+3H]/3 ^b
Ac-AQDWYYAWLJGRGGRGGRGG-NH₂	Y	469	1135.5 [M+2H]/2, 757.5 [M+3H]/3 ^b

Fig 79F

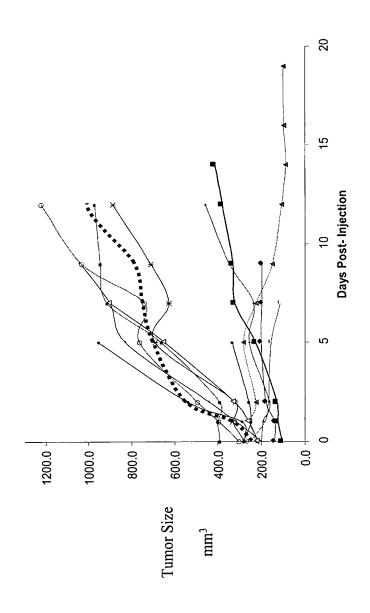
Title: KDR and VEGF/KDR... Inventors: Aaron K. Sato, *et al*.

Obtained ? SEQ ID NO MS Data† Compound Sequence/Structure (Parent Sequence in red text) Y/N 1416.8 [M+2H]/2, 944.8 [M+3H]/3, Ac-AQDWYYDEILJGRGGRGGRGGKK(iV-Dde)-NH2 470 708.9 [M+4H]/4, 571.5 [M+4H+Na]/5^b 1234.1 [M-2H]/2ª Ac-GDSRVCWPDSWGGEVCFRYDP-NH2 471 Ac-GDSRVCWEDSWGGVECFRYDP-NH2 Υ. 472 1250.0 [M-2H]/2ª 930.23 [M+3H]/3, 697.9 [M+4H]/4, 558.5 [M+5H]/5^b 473 Ac-AQDWYYDEILJGRGGRGGRGGK(JJ)-NH2 Y Ac-AQDWYYDEILSMADQLRHAFLSGGGGK(Biotin-JJ)-NH2 356 1820.5 [M-2H]/2, 474 Ac-WYLDRQADFMYSAQAEDSLILHGGGGGK(Biotin-JJ)-NH₂ 1213.4 [M-3H]/3ª

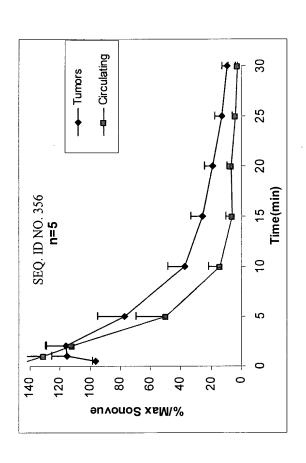
Fig 79G

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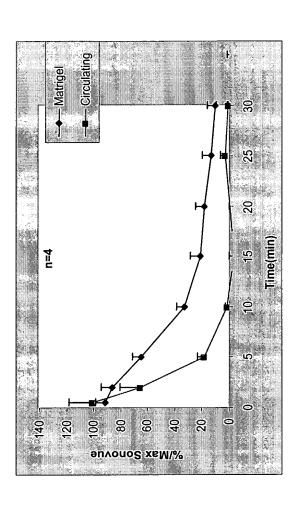




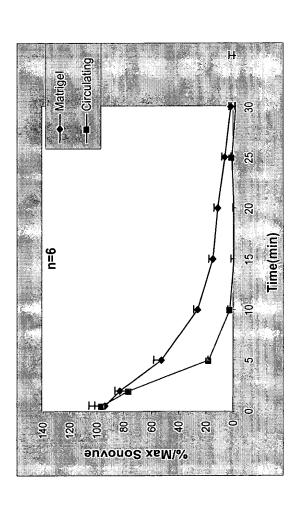


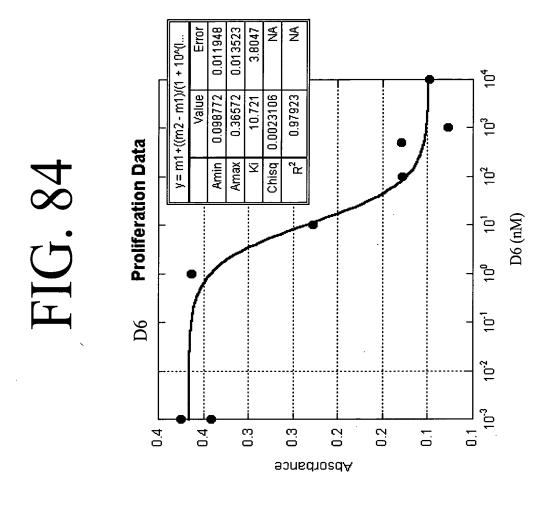




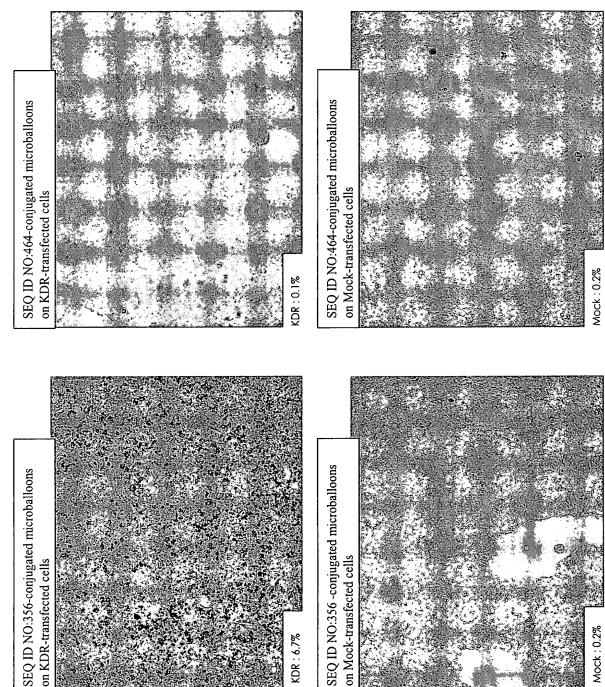












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3421.1012-006

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FIG. 87A

Ac-VCWEDSWGGEVCFRYDPGGGK[K(iV-Dde)]-NH₂

SEQ ID NO:337

Compound B / DIEA / DMF

Ac-VCWEDSWGGEVCFRYDPGGGK[PnAO6-Glut-K(iV-Dde)]-NH₂

SEQ ID NO:337

N

1) 10% Hydrazine in DMF 2) HPLC Purification

Ac-VCWEDSWGGEVCFRYDPGGGK[PnAO6-Glut-K]-NH2

SEQ ID NO:337

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FIG. 87B

Disuccinimidyl Glutarate / DIEA / DMF

1) Ac-VCWEDS WGGEVCFRYDPGGGK[PnA06-Glut-K]-NH, (SEQ ID NO:337, Compound 3)

2) Remove DMF, wash with ether 3X

3) Dry and re-dissolve

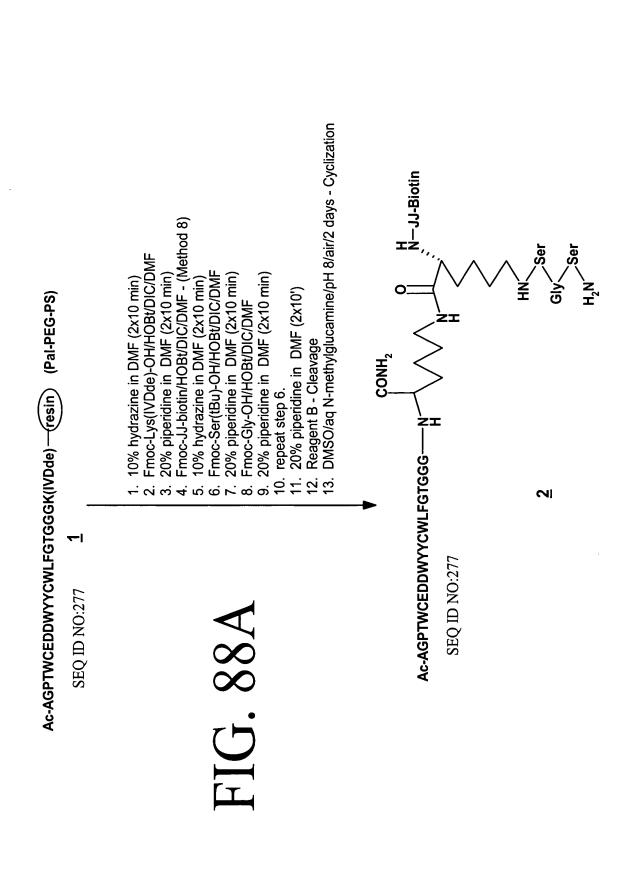
4) Ac-AQDWYYDEILJGRGGRGGRGGK(JJ)-NH₂ (SEQ ID NO:478)

5) HPLC Purification

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0 Ac-VCWEDSWGGEVCFRYDPGGG -N Ac-AQDWYYDEILJGRGGRGGRGG —N



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DMSO/ aq. N-methylglucamine /pH 8 /air / 48 h Ac-VCWEDSWGGEVCFRYDPGGGK(iV-Dde)—(resin) (Pal-PEG-PS) 20% piperidine in DMF (2x10 min) 20% piperidine in DMF (2x10 min) Fmoc-Ser(tBu)-OH/HOBt/DIC/DMF 20% piperidiné in DMF (2x10 min) 10% hydrazine in DMF (2x10 min) Fmoc-Gly-OH/HOBt/DIC/DMF Reagent B - (Cleavage) repeat step 2. Ac-VCWEDSWGGEVCFRYDPGGG-N 9.8.7.6.9 ကျ 41

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Ac-VCWEDSWGGEVCFRYDPGGG—N

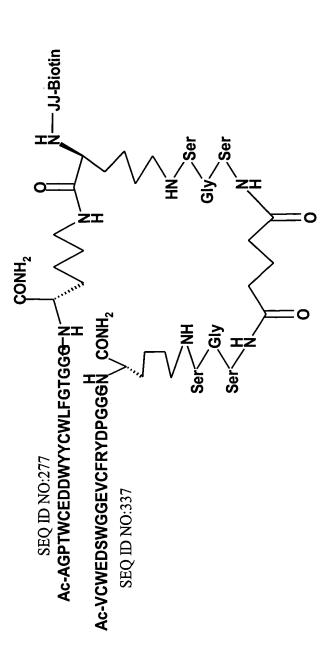
Compound 4 +

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CONH ιΩ Monomer compound 2 DIEA / DMF CONH2 ဖျ CONH Š ±ź Ac-AGPTWCEDDWYYCWLFGTGGG --- N-Ac-VCWEDSWGGEVCFRYDPGGG-N DMF/DIEA FIG. 88C

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FIG. 88D

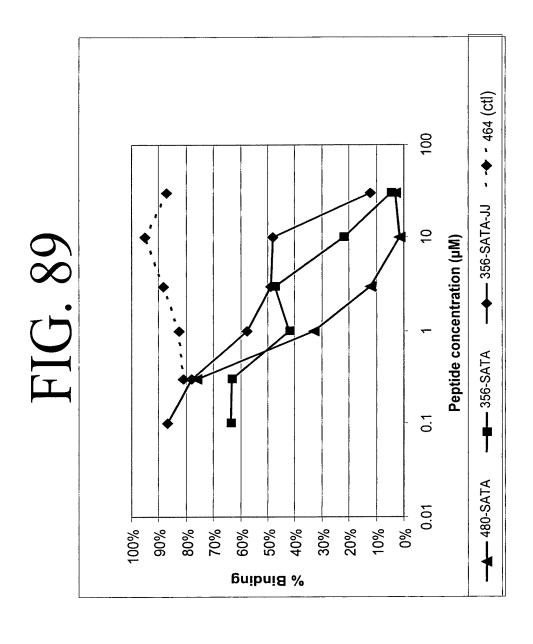


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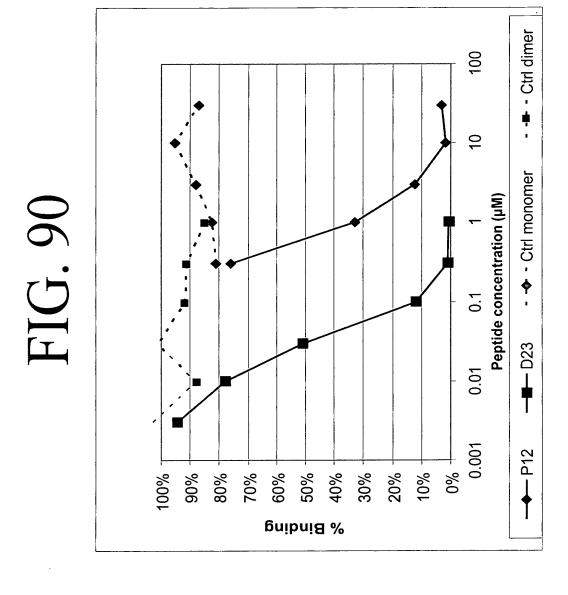
KDR and VEGF/KDR...



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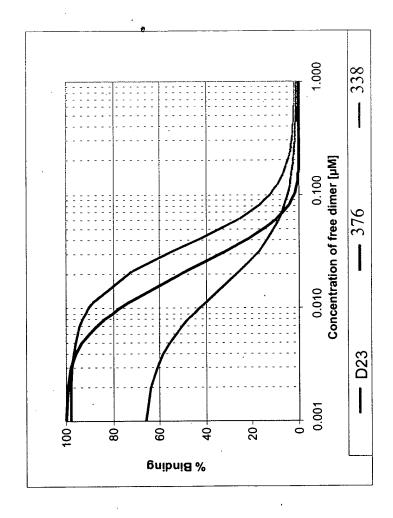


Docket No.: 3421.1012-006
Title: KDR and VEG

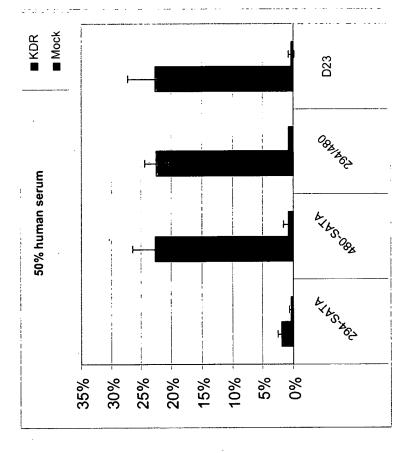


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Docket No.:

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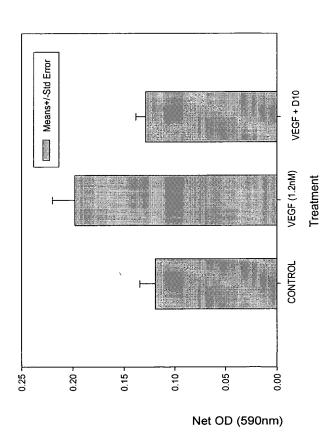
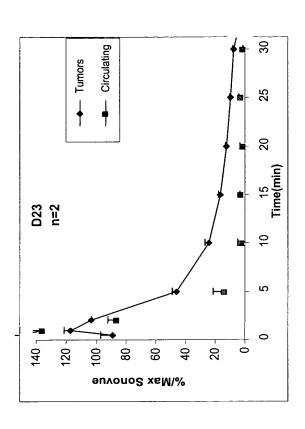


FIG. 94



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3421.1012-006 KDR and VEGF/KDR...

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FIG. 95

